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POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

PERIODIC REPORTING (PROPOSALS SIX AND SEVEN)	Docket No. RM2012-7

RESPONSES OF THE UNITED STATES POSTAL SERVICE TO QUESTIONS 1-10 OF CHAIRMAN'S INFORMATION REQUEST NO. 1

The United States Postal Service hereby provides its responses to Questions 1 through 10 of Chairman's Information Request No. 1. The request was issued on September 14, 2012, with responses due today. Each question is stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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RESPONSE OF THE UNITED STATES POSTAL SERVICE
TO CHAIRMAN'S INFORMATION REQUEST NO. 1

Question 1

The Petition (at 4) states:

> Using the FPS data source for the ICRA's reporting of Inbound International revenue, pieces, and weights would *improve the consistency* among the ICRA, RPW, and financial statements, and it would eliminate the need to make separate Booked Inbound International revenue calculations in the ICRA. (Emphasis added.)

For the FY 2012 International Cost and Revenue Analysis (ICRA), please confirm that the revenue, pieces, and weights reported for Inbound International Mail in the Excel files Reports (Booked).xls and Reports.xls will be the same as the revenue, pieces, and weights reported for such mail in the Revenue, Pieces and Weight Report (RPW). If not confirmed, please explain how the Foreign Postal System (FPS) data source would improve the consistency among, and describe all differences between, the Excel files Reports (Booked).xls and Reports.xls, and the RPW.

RESPONSE:

Not confirmed. The Imputed and Booked revenue results shown for FY 2011 in "Attachment 1 linked.xls," filed under seal in USPS-LR-RM2012-7/NP2, are less than two percent different, but convergence has not been entirely achieved. Pieces and weight will be the same in the FY 2012 ICRA Reports.xls file, the FY 2012 ICRA Reports (Booked).xls file and the FY 2012 Revenue, Pieces and Weights Report (RPW). Revenue will be the same in the FY 2012 ICRA Reports (Booked).xls file and the FY 2012 RPW report. The exception is the revenue in the FY 2012 Reports.xls file will not be the same as the revenue in the FY 2012 RPW Report. The ICRA will continue to separately calculate revenue in the Reports.xls file using settlement and conversion rates and the results of those calculations are not identical to the results shown in Reports (Booked).xls file. Given the history of maintaining both an Imputed and a Booked version, the Postal Service believes that FY 2012 is best treated as a transition year to integrate the first full year of FPS data as used in RPW into the ICRA.

As such, the FY 2012 ICRA will provide both the Imputed and Booked versions of the ICRA and the inbound revenue shown in the two reports will not be identical.

Question 2

The Petition (at 4) states:

> Note that this proposal does not entirely eliminate the need for both the Booked and Imputed versions because it does not address the Outbound International calculations.

a. For the FY 2012 ICRA, please explain why there should continue to be differences in the calculation of settlement costs (i.e., the amount of terminal dues, etc., paid to foreign postal administrations) paid by the Postal Service for Outbound International Mail between the Excel files Reports (Booked).xls and Reports.xls.

b. Please confirm that the Postal Service intends to eliminate the differences in the calculation of settlement costs for Outbound International Mail between the Booked and Imputed versions presented in the ICRA. If not confirmed, please explain.

RESPONSE:

a-b. The Postal Service recognizes the Outbound International reporting differences between the Excel files Reports (Booked).xls and Reports.xls and intends to pursue eliminating those differences in the future. The process includes more than simply ICRA reporting because the ICRA uses data from a variety of departments or functions, such as Accounting, FPS and RPW, and those functions must devote resources to investigating the issue, devising a plan and implementing a coordinated solution. As such, that effort will not be completed in time for FY 2012 ACR and the ICRA will continue to provide its traditional Outbound reporting methodology and format in the Reports (Booked).xls and Report.xls files.

Question 3

Please refer to the Petition at pages 4 and 5 under the heading "**Impact.**" Also, please refer to Library Reference USPS-LR-RM2012-7-NP1, and the Excel file Attachment 1.xls, which show that the Imputed (Scenario III) and Booked (Scenario IV) versions of the ICRA based upon FY 2011 FPS data report an increase in pieces of 2.89 percent and an increase in weight of 1.96 percent compared to the FY 2011 Booked version of the ICRA presented in Library Reference USPS-FY2011-NP2, Excel file Reports (Booked).xls. By contrast, in both the Imputed and Booked versions of the ICRA based upon FPS data, revenue decreases by 0.26 percent and 0.81 percent, and volume variable costs decrease by 1.23 percent and 0.01 percent, respectively. Please explain how revenue and volume variable costs decrease as pieces and weight increase.

RESPONSE:

The following logic explains either Attachment 1.xls or Attachment 1 linked.xls (filed under seal in USPS-LR-RM2012-7/NP2), but please refer to the properly linked Attachment 1 linked.xls file because it shows the correct amounts.

The cost difference between the Imputed (Scenario III) and Booked (Scenario IV) versions of the ICRA based upon FY 2011 FPS data is the same as the cost difference between the Imputed (Reports.xls) and Booked (Reports (Booked).xls) versions in Library Reference USPS-FY2011-NP2. That difference, 22,889, is due to the costing of international transportation and settlement expenses for outbound mail. It is part of the 23,001 difference shown on line 31comparing the FPS Booked version in Scenario IV with the ICRA Imputed version in Scenario I and it is also the difference if the ICRA Booked version in Scenario II is compared to the ICRA Imputed version in Scenario I. The difference between the 23,001 on line 31 and the 22,889 is the same difference of 112 that appears on line 35, which results from the product crosswalking and cost spreading that is done in the model.

Line 31 compares the FPS Booked version (Scenario IV) with the ICRA Imputed

version (Scenario I) to allow for a complete demonstration of the impact of this proposal when viewed along with line 35. Line 35 makes a booked version to booked version comparison, so only the minor difference of 112 appears. Line 31 though includes both the minor 112 difference and the larger 22,889 that is the booked to imputed difference regardless of whether the FY 2011 ICRA methodology is used to the FY 2011 FPS methodology is used. As such, volume variable costs are nearly unchanged as a result of using FPS as the inbound data source.

Question 4

Please refer to Library Reference USPS-LR-RM2012-7-NP1, and the Excel file Attachment 1.xls. This file compares the Revenue, Volume Variable Cost, Product Specific Cost, Contribution, Pieces, Volume Net Pounds, and Gross Pounds for the Imputed (Scenario III) and Booked (Scenario IV) versions of the ICRA based upon FY 2011 FPS data to the FY 2011 Booked version of the ICRA presented in Library Reference USPS-FY2011-NP2, Excel file Reports (Booked).xls. Attachment 1.xls is not linked to any files or data sources used to develop the items presented therein. As a result, certain figures cannot be reproduced (i.e., cells F22, F26, N22, N26, R22 and R26). Please provide Attachment 1.xls linked to all files, data sources and financial models used to develop the revenues, costs, pieces and weight presented in Attachment 1.xls.

RESPONSE:

Attachment 1 as filed did not reflect the final results shown in USPS-LR-RM2012-7-NP1. Attachment 1 linked.xls, filed under seal in USPS-LR-RM2012-7/NP2, properly links to USPS-LR-RM2012-7/NP1.

Question 5

The Petition (at 3) states, "With the use of FPS, there will no longer be a need for sheets for Air Transit Revenues and Inbound IPK." Library Reference USPS-LR-RM2012-7-NP1, Excel file Inputs.xls, shows the Air Transit Revenues worksheet tab highlighted in red, which indicates it will be deleted. The Air Transit Revenues worksheet includes a note stating that air transit revenues are "[n]ow included by country with terminal dues inbound revenue." Library Reference USPS-FY2011-NP2, Excel file Inputs.xls, worksheet tab Air Transit Revenues, shows these revenues in Cell G5 for "Open & Closed Air LC, AO, CP, M, EXPM."

a. In addition to reporting air transit revenues "with terminal dues inbound revenue for 'Air LC [and] AO,'" please confirm that air transit revenues will also be separately reported along with inbound revenue for Air "CP, M, [and] EXPM." If not confirmed, please explain.

b. In Library Reference USPS-LR-RM2012-7-NP1, Excel file Inputs.xls, the sum of air transit revenue shown for Air LC/AO in worksheet tabs Inbound Air KG CY1 and Inbound Air KG CY2 significantly exceeds the air transit revenue shown in Cell G5. Please explain.

RESPONSE:

a. Confirmed.

b. Researching this response revealed that that revenue provided to and reported by the ICRA may not have included all of the Transit Revenue. That problem will be corrected by using FPS as the inbound data source.

Question 6

Please provide the computer program and required input data used to expand the sample data and to generate distribution keys that incorporate the changes in this proposal. Please indicate the changes made to the current computer program to implement this proposal.

RESPONSE:

The program and inputs are contained in TRACS_Density.zip, filed under seal in USPS-LR-RM2012-7/NP2.

Two macros (PDENS_BUILD and PDENS_APPLY) are added to the existing SAS expansion program (zexp.PQqfy) to perform the following functions: (1) develop composite densities by mail category for parcels requiring density-based cubic-feet measures; and (2) assign cubic-feet measures to parcels using either captured dimensional information or composite density default values. The BUILD macro reads and summarizes cubic-feet and weight (lbs.) data from the subpopulation of parcels having dimensional information captured during the current and prior three reporting periods. As a result, both the numerator (weight) and denominator (cubic-feet) components of the density ratio for a mail category are continuously updated across four contiguous sampling periods, providing in effect for each component of the ratio, a dynamic, rolling four-quarter average.

The existing ITEMCUFT macro is interrupted at the density assignment step where the study-based densities are normally applied by mail shape (letter, flat or parcel). The APPLY macro is then called and executed to override this process for parcels. The APPLY macro assigns cubic-feet measures to parcels based on the combined product of their three dimensions if dimensional data are present, or based on

the product of their weight (lbs.) and reciprocal composite density measures. The ITEMCUFT macro is resumed after this step is completed, and no additional changes are made to downstream processing.

Question 7

Please provide a comparison of the FY 2011 costs by class and subclass of mail separately for cost segments 8 and 14 using the current and proposed methodologies.

RESPONSE:

TRACS CS8 Cost Table

Class, or Sub-class	TRACS With Existing Method[1] TOTAL CS8	TRACS Parcel Density Methodology Change TOTAL CS8	Net Changes	FY11 Volume	Change in Cost per Piece
UNITS	(000)	(000)	$(000)	(000)	$
FIRST-CLASS MAIL					
SINGLE-PIECE LETTERS	39,567	39,580	$13	24,550,824	$0.000
SINGLE-PIECE CARDS	1,697	1,707	$10	1,295,941	$0.000
PRESORT LETTERS	45,311	45,306	-$5	41,740,735	$0.000
PRESORT CARDS	1,621	1,621	$0	2,753,763	$0.000
FLATS	37,239	37,178	-$61	2,230,920	$0.000
PARCELS	35,199	37,754	$2,555	637,982	$0.004
TOTAL FIRST-CLASS	160,634	163,145	$2,511	73,210,165	$0.000
STANDARD MAIL					
HIGH DENSITY & SATURATION LETTERS	1,429	1,429	$0	5,653,875	$0.000
HIGH DENSITY & SATURATION FLATS & PARCELS	3,879	3,877	-$2	11,424,568	$0.000
CARRIER ROUTE	24,040	24,129	$89	9,335,928	$0.000
LETTERS	31,978	31,978	$0	50,584,189	$0.000
FLATS	41,401	41,236	-$165	6,783,186	$0.000
NOT FLAT-MACHINABLES & PARCELS	8,779	10,042	$1,264	733,770	$0.002
TOTAL STANDARD MAIL	111,506	112,692	$1,186	84,515,517	$0.000
PERIODICALS					
IN-COUNTY	0	0	$0	661,561	$0.000
OUTSIDE COUNTY	59,221	59,182	-$39	6,415,178	$0.000
TOTAL PERIODICALS	59,221	59,182	-$39	7,076,739	$0.000
PACKAGE SERVICES					
SINGLE-PIECE PARCEL POST	36,033	36,725	$691	70,218	$0.010
BOUND PRINTED MATTER FLATS	7,328	7,237	-$91	251,831	$0.000
BOUND PRINTED MATTER PARCELS	6,446	6,296	-$149	245,282	-$0.001
MEDIA AND LIBRARY MAIL	10,328	9,760	-$568	107,829	-$0.005
TOTAL PACKAGE SERVICES	60,136	60,018	-$118	675,160	$0.000
US POSTAL SERVICE	4,753	4,756	$2	434,596	$0.000
FREE MAIL	1,580	1,664	$84	61,854	$0.001
TOTAL MARKET DOMINANT	397,830	401,456	$3,626	165,298,872	$0.000
COMPETITIVE MAIL	161,393	157,416	-$3,977	1,213,166	-$0.003
INTERNATIONAL MAIL	26,139	26,490	$351	959,826	$0.000
TOTAL MAIL	585,362	585,362			

[1] TRACS preliminary PQ1-3 FY12 estimates applied to FY11 CS8 (w/piggyback) dollars.

TRACS CS14 Cost Table

Class, or Sub-class	TRACS With Existing Method[1] TOTAL CS14	TRACS Parcel Density Methodology Change TOTAL CS14	Net Changes	FY11 Volume	Change in Cost per Piece
UNITS	(000)	(000)	$(000)	(000)	$
FIRST-CLASS MAIL					
SINGLE-PIECE LETTERS	210,271	210,109	-$162	24,550,824	$0.000
SINGLE-PIECE CARDS	3,543	3,542	-$1	1,295,941	$0.000
PRESORT LETTERS	239,138	239,113	-$25	41,740,735	$0.000
PRESORT CARDS	7,397	7,432	$34	2,753,763	$0.000
FLATS	134,861	134,670	-$191	2,230,920	$0.000
PARCELS	115,626	123,599	$7,973	637,982	$0.012
TOTAL FIRST-CLASS	710,836	718,464	$7,628	73,210,165	$0.000
STANDARD MAIL					
HIGH DENSITY & SATURATION LETTERS	5,115	5,127	$13	5,653,875	$0.000
HIGH DENSITY & SATURATION FLATS & PARCELS	13,433	13,425	-$8	11,424,568	$0.000
CARRIER ROUTE	56,895	57,131	$236	9,335,928	$0.000
LETTERS	172,265	172,236	-$29	50,584,189	$0.000
FLATS	142,188	142,003	-$185	6,783,186	$0.000
NOT FLAT-MACHINABLES & PARCELS	42,171	48,224	$6,053	733,770	$0.008
TOTAL STANDARD MAIL	432,066	438,146	$6,080	84,515,517	$0.000
PERIODICALS					
IN-COUNTY	109	108	-$1	661,561	$0.000
OUTSIDE COUNTY	190,877	190,578	-$300	6,415,178	$0.000
TOTAL PERIODICALS	190,986	190,686	-$300	7,076,739	$0.000
PACKAGE SERVICES					
SINGLE-PIECE PARCEL POST	351,456	351,795	$339	70,218	$0.005
BOUND PRINTED MATTER FLATS	17,103	17,008	-$95	251,831	$0.000
BOUND PRINTED MATTER PARCELS	29,087	28,564	-$523	245,282	-$0.002
MEDIA AND LIBRARY MAIL	88,854	87,480	-$1,373	107,829	-$0.013
TOTAL PACKAGE SERVICES	486,499	484,847	-$1,652	675,160	-$0.002
US POSTAL SERVICE	21,890	22,097	$207	434,596	$0.000
FREE MAIL	5,554	5,555	$1	61,854	$0.000
TOTAL MARKET DOMINANT	1,847,832	1,859,794	$11,962	165,298,872	$0.000
COMPETITIVE MAIL	561,262	548,074	-$13,188	1,213,166	-$0.011
INTERNATIONAL MAIL	105,840	107,065	$1,226	959,826	$0.001
TOTAL MAIL	2,514,934	2,514,934			

[1] TRACS preliminary PQ1-3 FY12 estimates applied to FY11 CS14 vol. variable dollars. CS14 dollars only include purchased highway transportation costs.

Question 8

In the Appendix attached to Proposal Seven, the Postal Service states that the Origin-Destination Information System and Revenue, Pieces, and Weight (ODIS-RPW)-based factor of 0.785 will be applied for the subset of parcels identified as irregular in shape.

a. How do data collectors identify irregular-shaped parcels.

b. What is the percentage of irregular-shaped parcels in the total volume of all parcels?

c. Please describe the type of information that will be collected for irregular-shaped parcels under this proposal.

RESPONSE:

a. Irregular-shaped parcels are pieces that are not square or rectangular in appearance. Irregular-shaped parcels include pieces that have rolled, triangular, cylindrical, or other odd shapes.

b. Irregular-shaped parcels comprise 22 percent of the total volume of all parcels.

c. Length is recorded as the longest dimension. Height and width are measured at their maximum cross-sections. In addition, weight, mail category, and other information is recorded in the same manner as for letters, flats, and square or rectangular shaped parcels.

Question 9

The Postal Service states that "[f]or the small proportion of sampled parcels for which useable dimensional information is unavailable (approximately 5% of sampled parcels), a smoothed composite 4-quarter density ratio is developed by major mail category to convert sampled weight (lbs.) measures for these parcels to cubic feet measures." Petition, Appendix at 2.

a. Please describe the circumstances that generate unusable dimensional information.

b. Discuss and illustrate the methodology that will be used to smooth the 4-quarter density ratios.

RESPONSE:

a. Some data fields for mail items and handling units may not be complete due to data edits and cases where a data collector is unable to capture and record data. For example, in order to avoid interfering with postal mail processing and transportation operations, a data collector may not be able to record dimensional information for some parcels due to an unanticipated time constraint. Sampling of cross-docked containers may present another case where data collection activities might have to be compressed due to a time constraint. Additionally, a data collector may not be able to obtain access to an offloaded handling unit such as a locked CON-CON or tall Postal Pak, in which case, the handling unit is recorded as uncountable. Notwithstanding continual efforts made by headquarters administrative and field personnel to eliminate or reduce the number of occurrences of incomplete data, the targeted number of annual TRACS surface tests (approximately 12,500 tests across 5 modes) is set above a minimum to help ensure a sufficient effective (attained) sample size across sampling periods.

b. The proposed methodology represents an opportunity to improve the current measurement process used in TRACS to develop mail category-based cubic feet measures for parcels. The proposed methodology eliminates the indirect density-study based approach that requires updates via special studies to be performed at periodic intervals, replacing it with an exact, dimension-based measurement methodology. A direct measurement approach utilizing actual parcel dimensions to develop a cubic-foot based volume measure - which by general definition is the combined product of an object's three dimensions - is a natural and therefore preferred measurement approach over indirect alternatives, when dimensional measures are readily obtainable as is now the case in TRACS subsequent to the TRACS/CODES data collection and software improvements implemented in time for the Q1 FY2012 reporting period (see Appendix of Proposal Seven).

The proposed improvement also addresses the small subpopulation (3%) of incomplete dimensional information parcels by assigning to them default density measures formulated from continuously updated, moving quarter composite density ratios. Use of multiple quarters of data helps to mitigate major swings across sampling periods particularly for the smallest mail categories. The reliability and robustness of the cubic-foot component of the cost distribution key is improved by utilizing cubic feet measure obtained directly from large underlying sample test sizes (approximately 12,500 TRACS surface tests are conducted every four quarters across the five modes). Additionally, unlike for

periodic study-based measures, the continuous sampling of live mail better represents the actual mail activity found on trucks and vans across time. A tangential benefit under the proposed methodology is that the density of every parcel in a mail category will not be unrealistically identical to the study-based 'average' density.

For the small (3%) subpopulation of incomplete dimensional information parcels, a density default measure is still necessary. For this purpose, a continuously updated four-quarter based composite ratio is developed each quarter for each mail category. This ratio is then applied to the weight (lbs.) captured by the data collector for each parcel in the subpopulation. The default density for a mail category is constructed as the ratio of average pounds per parcel to average cubic-feet per parcel over the moving four-quarter period. The numerator and denominator components of this ratio are each obtained by summing across all parcels having useable dimensional values in the current and prior three postal quarters. The following table provides an example to illustrate the basic computation of the density ratio for a given mail category over a given contiguous four-quarter sampling period:

Composite Density Computation for a Mail Category (Example)

Period	(n) Parcels	Ave. Lbs/Pc	Ave. Cuft/Pc	Ratio
Q1	4500	3.340	0.410	8.146
Q2	4200	3.440	0.430	8.000
Q3	4200	3.340	0.420	7.952
Q4	4300	3.400	0.420	8.095
Totals (and composite)	17200	58126	7221	8.050

In this example, the density ratio of 8.050 lbs./cuft computed for the current quarter (Q4 in this example) represents the composite density ratio of weight (lbs.) to cubic feet over the current and prior three (Q1-Q3) quarters. The sample total for each variable for a period is obtained from the product of the sample count (n) and the sample average for the variable. The four totals are then summed for each variable and the ratio of the two sums is taken for the composite density measure. Generally, a composite measure would not be expected to match exactly a moving average-based measure (e.g., the arithmetic average of four independent ratios) for a population; however, the two measures would not be expected to differ measurably given the large sample sizes typically observed in TRACS across mail categories, notwithstanding external influential factors such as seasonality. In this example, the composite ratio and the arithmetic moving average are typically close, 8.050 and 8.048 (not shown), respectively. (Also see Section III, Appendix A of USPS-FY11-NP24.)

Question 10

Please refer to the table that contains estimated surface composite density factors (lbs./cubic feet) for those parcels with no dimensional information. Id. at 3.

a. Please provide similar estimated composite density factors for competitive parcel products with no dimensional information.

b. As shown in Table 1, below, the estimated surface composite density factors for First-Class, Standard, and Free Mail parcels are very different from the study-based density factors that are currently used in the Transportation Cost System (TRACS). Please explain the reasons for these differences.

Table 1

Comparison of Study-Based Density Factors with Estimated Composite Density Factors (Pounds/ Cubic Feet) for Parcels

Description	Study-Based Density Factors (1)	Estimated Surface Composite Density Factors (2)	Percent Change
First-Class	6.3398	3.97	-37%
Standard	7.964	3.25	-59%
Free Mail	20.2793	14.28	-30%

Sources: *Study-Based Density Factors*: TRACS Highway Subsystem documentation, USPS-FY11-36, Appendix C, Table 1.
Estimated Surface Composite Density Factors: Petition, Appendix at 3.

RESPONSE:

a. There are many new competitive products that do not have comparative 2009 study-based density factors.

Description	Study-Based Density Factors (1)	Estimated Surface Composite Density Factors (2)	Percent Change
Express	9.45	7.6612	-19%
Priority	8.13	8.0305	-1%
First-Class Commercial	n/a	4.1409	n/a
Parcel Return Service	n/a	6.4938	n/a
Parcel Select	n/a	5.9142	n/a
Parcel Select Lightweight	n/a	4.6715	n/a
Premium Forwarding Service	n/a	20.1095	n/a

b. Cubic feet measures obtained under the proposed methodology reflect significant improvements in reliability over the existing indirect, density-study (interim factor) methodology since the proposed approach utilizes actual dimensional information captured during TRACS live mail testing. In addition, the dimensional information is continuously updated across sampling periods. This dynamic live mail sampling approach more accurately reflects actual activity found on trucks and vans as opposed to periodic engineering study-based measures. Furthermore, sample sizes across sampling periods are large (approximately 12,500 TRACS surface tests are conducted every four quarters), helping to control variability. For the three mail categories cited, FCM, Standard Mail and Free Mail, the composite density measures are based on 6,344, 2,066 and 291 sampled mail pieces, respectively. The direct measurement of cubic feet improves the overall reliability of the cubic-foot component of the cost distribution keys used to assign transportation costs to postal products. (See also response to 9.b.)